

REMARKS

This Response is filed in reply to the Office Action dated September 21, 2004. In this Response, Applicants traverse the Examiner's rejections of claims 1-14, 18-21, 24-40, 44-47, and 50-52. Silence with regard to any of the Examiner's rejections is not an acquiescence to such rejections. Specifically, silence with regard to Examiner's rejection of a dependent claim, when such claim depends from an independent claim that Applicants consider allowable for reasons provided herein, is not an acquiescence to such rejection of the dependent claims, but rather a recognition by Applicants that such previously lodged rejection is moot based on Applicants' remarks and/or amendments relative to the independent claim (that Applicants consider allowable) from which the dependent claims depends. Applicants reserve the option to further prosecute the same or similar claims in the instant or a subsequent application.

Claims 1-14, 18-21, 24-40, 44-47, and 50-52 are pending in the present application. The issues of the September 21, 2004 Office Action are presented below with reference to the Office Action.

With regard to the Office Action, paragraphs 1-3: Applicants thank the Examiner for entering the Amendments filed on June 30, 2004 and for the withdrawal of the finality of the previous Office Action pursuant to 37 C.F.R. 1.114.

With regard to the Office Action, paragraphs 4-7: The Examiner rejected:

(1) claims 1-7, 18-19, 27-33, and 44-45 under 35 U.S.C. §103(a) as being unpatentable over Wistendahl et al. (U.S. Patent No. 5,708,845), in view of Bi et al. (U.S. Patent No. 6,311,178 B1) and Giddings (U.S. Patent No. 4,845,697);

(2) claims 8-14 and 34-40 as being unpatentable over Wistendahl et al., Bi et al., and Giddings and further in view of Logan et al. (U.S. Patent No. 6,199,076 B1); and

(3) claims 20-21, 24-25, 46-47, and 50-51 under 35 U.S.C. 103(a) as being unpatentable over Wistendahl et al., Bi et al., and Giddings and further in view of Yeomans (U.S. Patent No. 6,182,065 B1).

Wistendahl et al. Fail to Disclose Applicants' Feature (a)

As the Examiner knows, Wistendahl et al. teach that a "basic concept of the invention is the mapping of objects in digital media presentations as 'hot spots' without embedding any special codes in the original digital media content. This is accomplished by specifying the *display location coordinates* of selected objects within a frame or series of frames of a display and their frame addresses." (Wistendahl et al., col. 4 lines 60 - 65, emphasis added). Wistendahl et al., as shown pictorially in FIG. 2, is thus a *spatially-based display location coordinate system* and not a temporal system. Further, the system of Wistendahl et al. is only interested in identifying a selected "hot spot" and not the time at which the hot spot occurred. As described in Wistendahl et al., "the mapping of a number of 'hot spots' in each frame of a full motion video sequence or movie which may run from a few minutes to a few hours duration can be a hugely laborious task." (Wistendahl et al., FIGs. 5B - 5C, col. 10 lines 27-34).

It is unclear whether the Examiner intended the citation to Wistendahl et al., col. 7, lines 55-59 to support the proposition that both features (a) and (b) were disclosed, or only that feature (b) was disclosed. That reference states: "This interactive program will run the movie while displaying pop-up movie trivia about the stars Humphrey Bogart, Sidney Greenstreet, and Peter Lorre or objects such as the Maltese Falcon whenever the user clicks on these 'hot spots' appearing in different scenes in the film."

If the Examiner intended such citation to support the suggestion that Wistendahl et al. disclose feature (a) of Applicants' independent claims 1 and 27, there is no indication in such citation that a portion of the document (for which related documents are to be found) is identified "in response to a signal of interest at a particular time during the temporal document." Rather, such reference supports the notion that the disclosure of Wistendahl et al. is directed solely to the identification of a portion of the document (for which related documents are to be found) in response to a signal of interest *in a particular spatial location* within the document."

Thus, there is no teaching in Wistendahl et al. of "identifying a portion of the temporal document for which related documents are to be found" "in response to a signal of interest *at a particular time during the temporal document*," feature (a) of Applicants' independent claims 1 and 27.

Wistendahl et al. Fail to Disclose Applicants' Feature (b)

Applicants believe it more likely that Examiner cited to Wistendahl et al., col. 7, lines 55-59 to support the proposition that such reference discloses feature (b) of Applicants' independent claims 1 and 27. Again, however, Applicants respectfully disagree that such feature is disclosed by this reference.

Feature (b) of Applicants' independent claims 1 and 27 is directed to "selecting text associated with the portion of the temporal document identified." Then, "each term in the selected text" is "weighted" "by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs." Finally, "related documents" are found "by use of information retrieval techniques as applied to the weighted terms."

An example of the "text associated with the portion of the temporal document identified" is provided in the application, on p. 10, lines 11-14: "[E]ach video may have associated therewith closed captions which contain text that accompanies the video. The closed caption material may include the text of dialogue, or spoken words that accompany the video and constitute the audio track." An example of the "related documents" is provided in the application, on p. 14, lines 24-25: "The documents in the database include but need not be limited to Web pages or sites." Thus, for example, closed caption text associated with a portion of a video is utilized to find related Web pages or sites, which may be presented to the user.

In contrast, once a particular Wistendahl et al. "hot spot" is selected by a user, the "related documents" (i.e. documents more associated with feature (d) of Applicants' independent claims 1 and 17) in question simply are presented to the user. For example, in the reference cited by the Examiner, "the user clicks on [the] 'hot spots' appearing in different scenes of the film" and the result is the display of "pop-up movie trivia" about the subjects of the respective "hot spots." This "pop-up movie trivia" in Wistendahl et al. corresponds with Applicants' "related documents" (although not ones found "by use of information retrieval techniques as applied to the weighted terms"), and *not* to "text associated with the portion of the temporal document identified."

Nowhere in this section of the reference or, anywhere else in Wistendahl et al. for that matter, is there disclosure of the use of selection of "text associated with the portion of the temporal document identified," such as, for example, closed captions or spoken words from an

audio track. Thus, Wistendahl et al. fail to disclose element (b) of Applicants' independent claims 1 and 27.

Combination of Element (c) With Wistendahl et al. Would Not Be Possible

With regard to independent claims 1 and 27 in (1) above, Applicants agree with the Examiner's statement on page 3 of the Office action that Wistendahl et al. do not teach feature (c) of Applicants' independent claims 1 and 27. Moreover, Applicants contend that the combination of feature (c) of Applicants' independent claims 1 and 27 with Wistendahl et al. (regardless of whether such feature is disclosed by any other references cited by Examiner) would not be possible.

In the first place, as described immediately above, there is no "selecting text associated with the portion of the temporal document identified" (i.e. feature (b) of Applicants' independent claims 1 and 27) by Wistendahl et al. Thus, there is no "selected text" which may be "weighted . . . by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs." For example, even were feature (c) of Applicants' independent claims 1 and 27 obvious to one of ordinary skill in the art (which Applicants do not believe it was), there would be nothing to which the function $W(t)$ could be applied, since there is no associated text selected.

Moreover, as discussed above, the system of Wistendahl et al. functions exclusively by: (1) the pre-determination of specific "hot spots" within the media content; and (2) the selection of a specific "hot spot" by the user. However, once a particular "hot spot" in question disappears from the screen, the user simply has no opportunity to select it and Wistendahl et al. disclose no procedure whereby subsequent clicking by the user would or could be associated with previously presented "hot spots." As described by Wistendahl et al, "the user clicks on these 'hot spots' *appearing in different scenes of the film.*" (col. 7, lines 58-59). Moreover, Wistendahl et al. disclose no procedure whereby a user can click on anything other than a pre-determined "hot spot."

Therefore, there simply is no opportunity to apply a weighting function $W(t)$ to any terms utilized by Wistendahl et al. *according to the time t at which the term occurs relative to the time at which the signal of interest occurs.* Thus, regardless of the availability of other references that may (or may not) disclose the use of such a weighting function $W(t)$, the combination of any

such reference with Wistendahl et al. would not result in a functioning system having feature (c) of Applicants' independent claims 1 and 27.

Bi and Giddings Do Not Disclose Feature (c)

The Examiner contends that the combination of Bi et al. with Giddings provides feature (c) of Applicants' independent claims 1 and 27. Applicants respectfully disagree.

Independent claims 1 and 27 are directed to finding documents which relate to a portion of a temporal document. The application recognizes that "a user may not be able to instantaneously think about the changing material [in a temporal document] that is being presented, make a decision that he is interested, and give the required signal. Moreover, it is understood that ... the decision may be based upon a sequence of material presented over a period of time, rather than based upon the material at a particular instant." Therefore, "it is assumed that there is a delay between the material of interest first being presented to the user, and the indication of interest, and it is further assumed that the user is interested in material which extends over a period of time." Thus, "it is assumed that the interest of the user in the content of the temporal document may be expressed as a function $W(t)$ of the time t prior to the signal indicating interest being given." (application, page 11 lines 1-14). Accordingly, independent claims 1 and 27 recite, among other things, selecting text associated with a portion of the temporal document, and *weighting each term in the selected text by a function $W(t)$ according to the time t at which the term occurs relative to the time at which the signal of interest occurs.*

Nowhere in either Bi et al. or Giddings is there any teaching of *weighting each term according to the time t at which the term occurs relative to the time at which the signal of interest occurs.* The Office Action on page 3 recognizes that Bi et al. only teach weighting search terms to query a database. Examiner cites to col. 2, lines 38-48, which states: "It is preferred that in the computer matching system of the present invention, said requirement includes multiple elements as search criteria, each of said elements is assigned a weight of importance thereby each matching result has a search score indicating satisfaction level of said user ..." However, Bi's weights of importance : (a) are assigned by the user and are based solely on user preference (col. 11, lines 31-32; col. 12, lines 64-67); and (b) have nothing to do with *the time t at which the term occurs relative to the time at which the signal of interest occurs.*

Bi et al. provide an example of the assignment of weights they employ: "As an example, a user specifies that he is looking for a pair of tennis shoes with a price below \$100 and color is either 'white' or 'Blue', but also specifies that the color is very important *by giving a wight of 80 out of 100 to the color*. The system, while evaluating the criteria, accepts any white or blue tennis shoes as a partial match and those below \$100 as a full match." (col. 13, lines 3-9). Thus, as recognized by the Examiner, Bi et al. only teach weighting search terms to query a database and do not teach *weighting each term according to the time t at which the term occurs relative to the time at which the signal of interest occurs*.

Giddings also fails to provide such teaching. Rather, Giddings is directed to searching for a CD track frame number, where the search occurs for a predetermined length of time, or a "time-out" period, before proceeding with a different search. Giddings teaches that upon failure to find a selected frame in a *predetermined length of time*, the search mechanism would try to find an adjacent frame with the same kind of back and forth searching motion for a *second predetermined length of time*." (Giddings, col. 5 lines 27-53, emphasis added). For example, as shown in Giddings in FIG. 6, the system of Giddings tries to find a CD track T_0 for 4.25 seconds, and upon failure to find that CD track, searches for track T_0+1 for 1.5 seconds, and then track T_0+2 for another 1.5 seconds. (Giddings, FIG. 6; col. 15 line 47 - col. 16 line 23). With reference to Applicants' independent claims 1 and 27, the "terms" in Giddings can be equated to the individual track numbers T_0 , T_0+1 , T_0+2 , etc. Giddings' subsequent search thereof for a *predetermined length of time* or time-out, however, is not the same as Applicants' *weighting each term according to the time t at which the term occurs relative to the time at which a signal of interest occurs*, as claimed in Applicants' independent claims 1 and 27.

Further, Giddings performs a search for an adjacent track based on inherent relationships in the tracks' numerical ordering, e.g., the *track numbering system* between track T_0 and higher numbered tracks T_0+1 , T_0+2 , etc. Giddings thus does not teach searching for track T_0+1 because it occurs at a particular time *relative to* a signal of interest, as claimed in Applicants' independent claims 1 and 27, but rather, Giddings searches because of the numerical relationship. Applicants thus consider that Giddings does not provide any teaching of *weighting each term in the selected text according to the time t at which the term occurs relative to the time at which a signal of interest occurs*.

As Examiner knows, and based at least on MPEP 2143, a *prima facie* case of obviousness under 35 U.S.C. 103(a) requires (1) a suggestion or motivation in the references themselves or generally known in the art, to combine the references, (2) a reasonable expectation of success to combine, and (3) a teaching, via the combination, of all the claimed limitations. *In re Vaeck*, 947 F. 2d. 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Because none of Wistendahl et al., Bi et al., or Giddings, alone or in combination, teaches *weighting each term in the selected text according to the time t at which the term occurs relative to the time at which a signal of interest occurs*, as claimed by Applicants in independent claims 1 and 27, a *prima facie* case of obviousness is not satisfied under 35 U.S.C. 103(a) at least for failing to show that all elements of Applicants' claims would be satisfied by the combination.

Applicants also note that regardless of Examiner's failure to satisfy all elements of the claimed combination, one of ordinary skill in the art would *not* find it obvious to modify Wistendahl et al. based on Bi et al. and Giddings. First, such references are from disparate areas of art, with Wistendahl et al. directed to selections of media, while Bi et al. is directed to database searching, and Giddings is directed to searching for CD (compact disk) tracks. Second, one of ordinary skill simply would not modify a system such as Wistendahl et al., which relies on spatial discrimination of features, to derive a temporal system such as that claimed by Applicants in independent claims 1 and 27.

As described above, the system of Wistendahl et al. is only interested in identifying a selected "hot spot" and not the time at which the hot spot occurred. As described in Wistendahl et al., "the mapping of a number of 'hot spots' in each frame of a full motion video sequence or movie which may run from a few minutes to a few hours duration can be a hugely laborious task." (Wistendahl et al., FIGs. 5B - 5C, col. 10 lines 27-34). Because Wistendahl et al. teach a *spatially-based* system that does *not* need or desire searching or *weighting based on the time t at which a "hot spot"/term occurs relative to the time at which a signal of interest occurs*, it would *not* be obvious to one of ordinary skill in the art to thus modify Wistendahl et al. as proposed by Examiner.

Accordingly, Applicants consider that the Examiner fails to satisfy all three elements of the *prima facie* showing of obviousness required for a rejection based on 35 U.S.C. 103(a). Applicants thus traverse the rejection of independent claims 1 and 27, and for this reason, consider independent claims 1 and 27 to be allowable. Claims 2-14, 18-21, and 24-26 depend

upon allowable independent claim 1, and claims 28-40, 44-47, and 50-52 depend upon allowable independent claim 27, and thus, claims 2-14, 18-21, 24-26, 28-40, 44-47, and 50-52 are also allowable for depending upon an allowable base claim.

With regard to the Office Action, paragraph 8: Applicants note with appreciation the Examiner's finding that claims 26 and 52 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Conclusion

Applicants consider the Response herein to be fully responsive to the referenced Office Action. Based on the above Remarks, it is respectfully submitted that this application is in condition for allowance. Accordingly, allowance is requested. If there are any remaining issues or the Examiner believes that a telephone conversation with Applicants' attorney would be helpful in expediting the prosecution of this application, the Examiner is invited to call the undersigned at (212) 395-8099.

Respectfully submitted,



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